Pelecystola fraudulentella (Zeller, 1852) discovered in Slovakia, a third locality record (Tineidae)

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Abstract. The occurrence of *Pelecystola fraudulentella* (Zeller, 1852) in Slovakia is recorded. This species was hitherto only known from two distant localities in Slovenia and southeastern Sweden. Photographs and sketches are given of the male and female adults and genitalia.

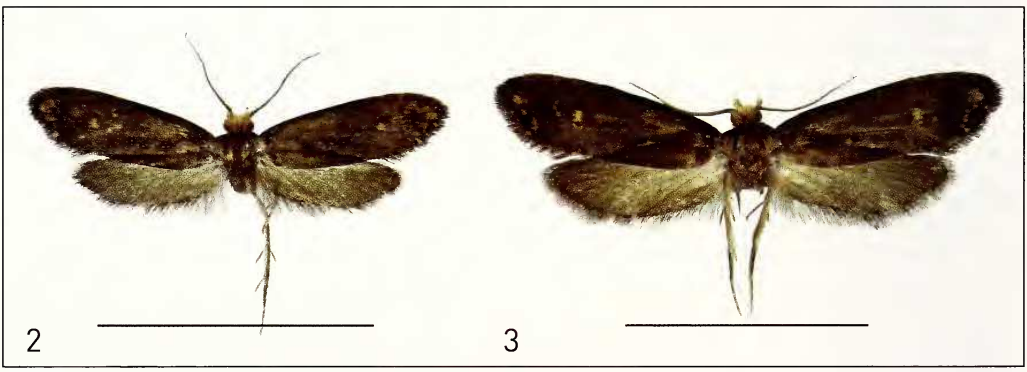
Introduction

In 2001 the first author received for determination from the second author drawings of male and female genitalia of two specimens collected in Slovakia. However, at this time it was impossible to identify them.
Only recently, following the discovery of the same species in Sweden (Lindeborg & Bengtsson 2009) was it possible to solve this problem. The illustrations of the genitalia published in this paper of the male lectotype of *Pelecystola fraudulentella* (Zeller, 1852) and the female specimen, collected in Sweden, show that the specimens from Slovakia belong to the same species. Information on this very remarkable record had also been published by Lindeborg (2008) and by Svensson (2008).

Pelecystola fraudulentella (Zeller, 1852)

Ivan Richter, a Slovak amateur entomologist, collected two specimens of *Pelecystola fraudulentella* (Zeller, 1852) in a locality near the village of Lehota pod Vtáčnikom, western Slovakia, on the 9th of June 2000. He informed us that these specimens (one male, one female) were caught on the wing at twilight, on a warm evening.
The locality is situated approximately two km from the village in the direction of Vtáčnik Mountain (Strážovské vrchy Mauntains) at an altitude of about 500 m. This is a canyon with steep rocky slopes, lower parts of which merge into a deciduous forest densely strewn with andesitic rocks. Moths were found close to a path running through the canyon on the north-facing slope (Fig. 1).
Beeches (*Fagus sylvatica* Linnaeus (Fagaceae)) dominate the forest, mixed with sycamore (*Acer pseudoplatanus* Linnaeus (Sapindaceae)) and sporadically with other broadleaved trees. At higher altitudes on this path the deciduous forest becomes a mixture of fir and beech. The projecting rocks in the forest are covered with moss and lichens.
This is now the third known locality in Europe for the species which, for more than 150 years, was known only from the type locality (Laibach [= Ljubljana]) in Slovenia. The site in which the specimens were collected in Slovakia is similar to that in Sweden.

Fig. 1. Locality in which the Sovakian specimens of *P. fraudulentella* were collected.



Figs 2–3. *Pelecystola fraudulentella*. **2.** Male (wingspan: 15 mm) (scale: 10 mm). **3.** Female (wingspan: 20.5 mm) (scale: 10 mm).

Ivan Richter also tried to find adults of *Pelecystola fraudulentella* in the following two years, but was unsuccessful. The site, unfortunately, has been changed by man during the last several years and now the road leads through the canyon towards a newly opened quarry. Nevertheless, it is to be hoped that *Pelecystola fraudulentella* could be resident in similar localities elsewhere.

Fig. 4. Male head.

Fig. 5. Male antenna.

For the detailed description of the adult of this tineid, including the genitalia of both sexes, see Lindeborg & Bengtsson (2009). Here, we present photographs of the male (Fig. 2) and the female (Fig. 3) adults from Slovakia and, in more detail, the male head (Fig. 4) and male antenna (Fig. 5). Figures 6 and 7 show the male (from the lectotype slide) (6) and the female (7) genitalia. As the bursa copulatrix was lost in the slide of the Slovakian specimen, we illustrate the photo of the Swedish specimen, which was kindly sent to us by our colleague Bengt Å. Bengtsson.

Diagnostic and remarkable are the ciliae on the male antenna, which are 1.5 times longer than the diameter of the antenna, the pectinifera of the valva in the male genitalia, and the paired signum of the female. So far as known, there are no similarities in these features to any other Palaearctic tineid.

Lindeborg & Bengtsson (2009) discussed in great detail the assignment of *Pelecystola fraudulentella*. Up to now, according to Robinson (2007) the species has not been assigned to any subfamily. The genus may belong to a subfamily not yet defined and erected.

Seven other species of genus *Pelecystola* Meyrick, 1920 are known: four species from Africa (Gozmány & Vari 1973), one from the Nearctic (Davis & Davis 2009), one from the East Palaearctic subregion (*P. strigosa* (Moore, 1888)), and *P. hierophanta* (Meyrick, 1916) known from India (Lindeborg & Bengtsson 2009) and Japan (examined material).

Bionomy. The food-plant and the early stages are unknown. Adults have been collected only in June. Known localities indicate that it probably occurs in deciduous or mixed ancient forests. The larva may feed on fungi, rotten wood, bird's nests, etc., in the same way as larvae of many other species in the family.

Distribution. Currently the species is known from three widely separated localities in Slovenia (Ljubljana), Slovakia (Lehota pod Vtáčnikom env., Strážovské vrchy Mts.) and Sweden (NR Grytsjön, Bäckebo, Nybro) (Fig. 8). To avoid misunderstanding in the future, it should be noted that in the collections of the Zoological Museum of St. Peterburg an additional specimen is deposited under the name *fraudulentella* from "Semmering [Austria], 6. [18]48, leg. Mann" , slied Nr. 4044. The first author checked this slide, and the genitalia structure is completely different from that of *fraudulentella*.

Remarks. Why has *Pelecystola fraudulentella* been collected so infrequently up to now? We think there are several reasons: little collecting has been done in localities like ours, possibly the flight time of the adults is restricted, or the species may not

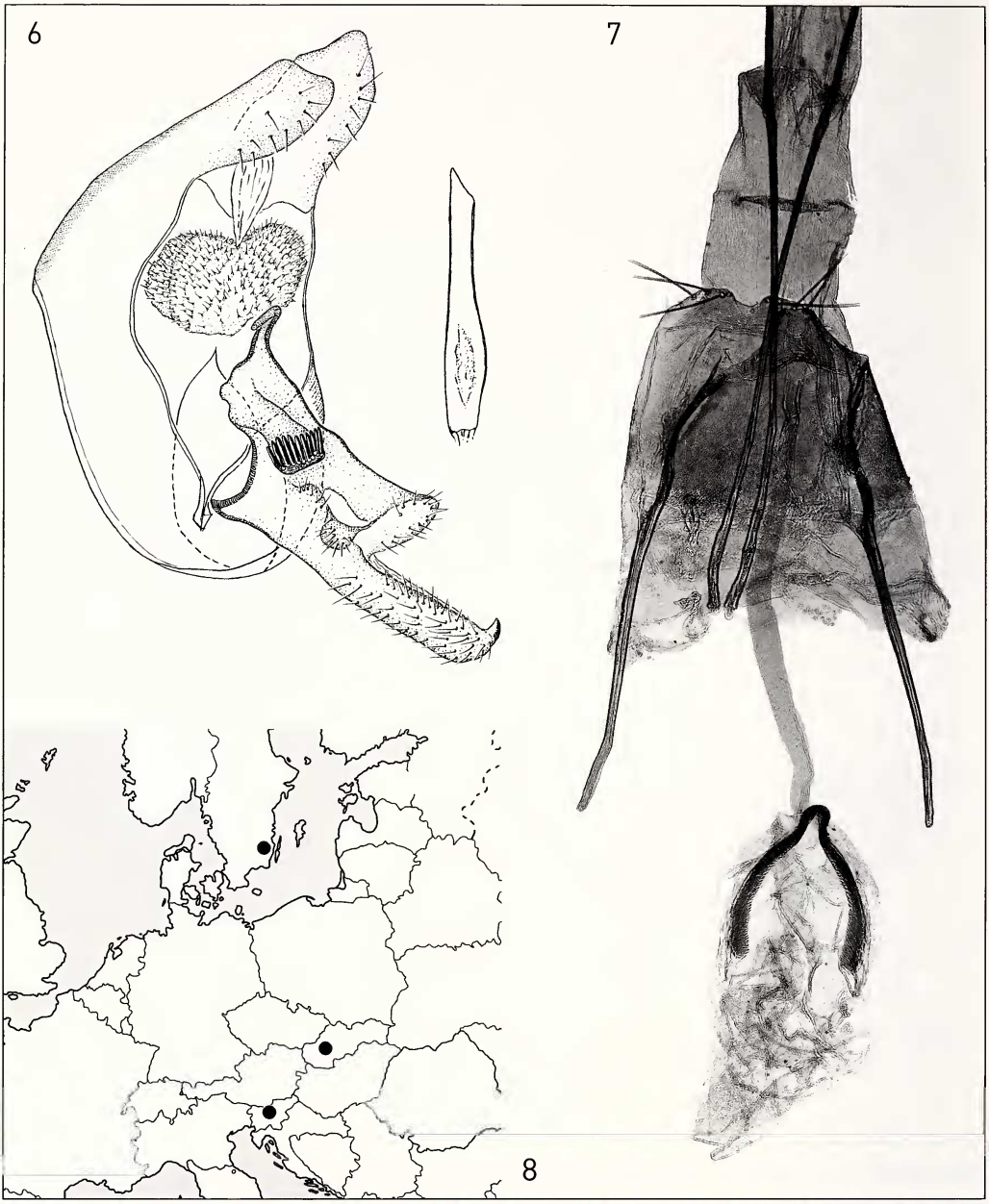


Fig. 6. Male genitalia (after lectotype slide G.S. Robinson 12195, Brit. Mus. (N.H.) London). **Fig. 7.** Female genitalia (photo: Bengt Å. Bengtsson). **Fig. 8.** Distribution map of *P. fraudulentella*.

be attracted light. Furthermore, the immature stages of the species may be secretive and difficult to locate. We also fully agree with the other opinions of Lindeborg & Bengtsson (see: "Discussion" in their paper) about the possibilities for collecting this species. In the USA *Pelecystola nearctica* is regulary collected at light (Davis & Davis 2009).

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